

**PATENT APPLICATION
042390.P11559****R marks**

Reconsideration of this application is requested. Claims 30-32 have been added. Accordingly, claims 1-32 are in the Application.

Response to Claim Objections

Claims 12-15 have been amended to overcome the objection. The amendments to claims 19 and 20 are truly cosmetic. Therefore, Applicant believes that at least for this reason, these claims are not subject to the complete bar against the use of the Doctrine of Equivalents as outlined in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*

Response to 35 U.S.C. §112 Rejections

Claims 6 and 28 have been amended to overcome the 35 U.S.C. §112 rejection. The amendments to claims 6 and 28 are truly cosmetic. Therefore, Applicant believes that at least for this reason, these claims are not subject to the complete bar against the use of the Doctrine of Equivalents as outlined in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*

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Response to 35 U.S.C. §103 rejection of claims 1-3, 8, and 24-26

The Office action rejects claims 1-3, 8, and 24-26 under 35 U.S.C. §103 (a) as being unpatentable over Abraham et al. (U.S. Patent No. 6,072,718).

Applicants respectfully traverse this rejection in view of the remarks that follow.

1) Abraham et al. does not discuss "polymer"

Applicants respectfully submit that the Office action misrepresents the teachings of Abraham et al. On pages 3-6 of the Office action, it is repeatedly stated that Abraham et al. discloses a polymer memory device. Applicants respectfully disagree. Abraham et al. does not mention the term "polymer" anywhere in that document. The Examiner appears to admit this on page 4 of the Office action in stating that Abraham et al. neither explicitly teach that the discrete, spaced-apart structures being made of polymer.

2) No suggestion or motivation has been provided to modify Abraham et al. as suggested by the Office action

It is respectfully submitted that the Office action has not established a prima facie case of obviousness. It is well established that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See e.g., M.P.E.P. §2142. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

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The Examiner states on page 4 of the Office action that Abraham et al. neither explicitly teach that the discrete, spaced-apart structures being made of polymer. The Examiner then apparently states that it would have been obvious to use polymer in the devices discussed in Abraham et al., and then refers to Bacon et al. (U.S. Patent No. 5,927,206), which mentions polarizable ferroelectric materials. However, Applicants submit that the Examiner has only provided a conclusory statement and has not provided any suggestion or motivation to modify Abraham et al. to use a polymer structure or to combine the references of Abraham et al. and Bacon et al. The factual question of motivation to combine is material to patentability, and can not be resolved on subjective belief and unknown authority. See *In re Lee*, 277 F.3d 1338, 61 U.S.P.Q.2.D. (BNA) 1430 (Fed. Cir. 2002) ("teachings of references can be combined only if there is some suggestion or incentive to do so ... the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious ... Conclusory statements such as those here provided do not fulfill the agency's obligation ... Thus when they [the Board] rely on what they assert to be general knowledge to negate patentability, that knowledge must be articulated and placed on the record ... The board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies.")

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3) The proposed modification would change the principle of operation of Abraham et al.

In addition, it is respectfully submitted that the proposed modification would change the principle of operation of Abraham et al. Abraham et al. discusses magnetic random access memory (MRAM) devices, formed using ferromagnetic materials. (see e.g., column 1, lines 44-47, and column 5, lines 20-30, of Abraham et al.). Abraham et al. further discusses programming the MRAM cells using large currents passed through write lines and bit lines, and reading the MRAM cells by determining resistance of the memory cell using a sense current. (see e.g., column 7, lines 11-37, of Abraham et al.) It is respectfully submitted that modifying Abraham et al. to use ferroelectric materials rather than ferromagnetic materials would change the principle of operation of Abraham et al.

Since the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious.

Since the Office action has not established a prima facie case of obviousness for the reasons stated above, the rejection of claims 1 and 24 should be withdrawn and it is believed that claims 1 and 24 are in condition for allowance.

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Response to 35 U.S.C. §103 rejection of claims 9-23

The Office action rejects claims 9-23 under 35 U.S.C. §103 (a) as being unpatentable over Matsuoka et al. (U.S. Patent Application No. 2002/0093845). Applicants respectfully traverse this rejection in view of the remarks that follow.

1) Matsuoka et al. does not discuss "ferroelectric polymer structure"

It is respectfully submitted that the Office action misrepresents the teachings of Matsuoka et al. On pages 6-10 of the Office action, it is repeatedly stated that Matsuoka et al. discloses a ferroelectric polymer structure. Applicants respectfully disagree. Matsuoka et al. does not mention the terms "ferroelectric" or "polymer" anywhere in that document.

2) Office action has not established a prima facie case of obviousness

It is respectfully submitted that the Office action has not established a prima facie case of obviousness. The Office action has not provided references that teach or suggest all the claim limitations and has not provided any suggestion or motivation to modify the cited document as suggested by the Examiner on page 7 of the Office action.

It is well established that the prior art reference (or references when combined) must teach or suggest all the claim limitations (see e.g., M.P.E.P. §2142) . It is respectfully pointed out that the Office action has only cited one document in the rejection of claims 9 and 16, i.e., Matsuoka et al. As discussed above, Matsuoka et al. at least does not discuss "ferroelectric" or "polymer" structures.

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In addition, the Office action has not provided any suggestion or motivation to modify the Matsuoka et al. as suggested by the Examiner on page 7 of the Office action. Further, it is respectfully pointed out that Matsuoka et al. appears to only discuss magnetic random access memory (MRAM) devices.

Since the Office action has not established a prima facie case of obviousness for the reasons stated above, the rejection of claims 9 and 16 should be withdrawn and it is believed that claims 9 and 16 are in condition for allowance.

Claims 10-15 depend either directly or indirectly from claim 9 and are believed to be allowable for the same reasons as claim 9. Claims 17-23 depend either directly or indirectly from claim 16 and are believed to be allowable for the same reasons as claim 16.

Allowable Subject Matter

Applicant would like to gratefully acknowledge the Examiner's indication that claims 6, 7, 28, and 29 would be allowable if rewritten in independent form. However, Applicants have provided reasons above why the base independent claims 1 and 24 are allowable. Therefore, Applicants respectfully request that the Examiner withdraw the objection to claims 6, 7, 28, and 29 for the reasons stated above.

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New Claims

As indicated above, claims 30-32 have been added. Claims 30-32 are believed to be allowable. Support for claims 30-32 may be found at least in FIG. 10 and in the corresponding description of the Application.

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Conclusion

In view of all of the above, it is believed that Applicants' claims are allowable, and the case is in condition for allowance, which action is earnestly solicited. Reconsideration of the rejections and objections is respectfully requested.

Should it be determined that an additional fee is due under 37 CFR §§1.16 or 1.17, or any excess fee has been received, please charge that fee or credit the amount of overcharge to deposit account #02-2666.

If the Examiner believes that there are any informalities that can be corrected by an Examiner's amendment, a telephone call to the undersigned at (480) 552-0624 is respectfully solicited.

Respectfully submitted,
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